



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/778,236	02/06/2001	Alan R. Smith	STL920000102US1	4245

24852 7590 06/04/2004

INTERNATIONAL BUSINESS MACHINES CORP  
IP LAW  
555 BAILEY AVENUE , J46/G4  
SAN JOSE, CA 95141

EXAMINER

TANG, KENNETH

ART UNIT	PAPER NUMBER
----------	--------------

2127

DATE MAILED: 06/04/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/778,236

Applicant(s)

SMITH, ALAN R.

Examiner

Kenneth Tang

Art Unit

2127

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☒ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2/6/01</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

1. Claims 1-48 are presented for examination.

#### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. In claims 1, 20, and 38, the term “actual PCB” is indefinite because it is not made explicitly clear in the claim language the difference between a “PCB” and an “actual PCB.”

- b. In claims 1-3, 6-22, and 25-44, Applicant is required to clearly specify all the abbreviations of PCB, IMS, DEDB, HDAM, HIDAM, BMP, DLI, DBB, MPP, and IFP.

- c. In claims 9-10 and 13, it is not made explicitly clear of their dependencies. For example, in claim 9, it is not made explicitly clear whether it depends on claim 8 or depends on claim 1. Claims 10 and 13 are rejected for the same reason.

- d. In claim 19, the use of the word “characteristics” (line 5) is inappropriate since 35 USC § 112, second paragraph, requires the claim to particularly point out and distinctly claim the invention, not merely its characteristics. Furthermore, if this word is eliminated, then the remaining format of the claim should be modified in order to reflect this correction.

- e. Claim 22 recites the limitation "the type HDAM" (1<sup>st</sup> line). There is insufficient antecedent basis for this limitation in the claim.
- f. Claim 42 is rejected for the same reasons as stated in the rejection of claim 19 above.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**3. Claims 1-16, 19-35, 38-45, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art in the Specification (hereinafter AAP) in view of Bauer et al. (hereinafter Bauer) (US 5,758,333).**

4. As to claim 1, AAP teaches a method for performing on a computer system one or more form independent application program operations on at least one IMS resource comprising:

(a) at least one IMS resource exclusive of predetermined knowledge pertaining to an IMS construct form (*page 6, lines 4-10*), and

(b) locating/utilizing and performing said one or more application program operations on said at least one IMS resource (*page 6, lines 4-10*).

5. AAP fails to explicitly teach performing the previously stated limitations with an actual PCB (data control block) performing one or more form independent application program

Art Unit: 2127

operations. However, Bauer teaches a data management system performing independent application program operations using pointers to data blocks (*col. 7, lines 10-20*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of having an actual PCB (data control block) performing one or more form independent application program operations because it offers more flexibility and program operations can perform with its own individual way of doing things. Any changes to the logical data structure will have no effect on the applications (*col. 5, lines 8-22*).

6. As to claim 2, AAP teaches wherein said IMS resource is a database (*page 1, lines 19-21*).

7. As to claim 3, AAP in view of Bauer fails to explicitly teach wherein said database is of a type selected from the group consisting of DEDB, HDAM and HIDAM. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of wherein said database is of a type selected from the group consisting of DEDB, HDAM and HIDAM because it would increase the flexibility of the system by being able to choose from various different types rather than operating only on one type.

8. As to claim 4, AAP teaches wherein said application program operations include unloading said database (*page 2, lines 14-16*).

Art Unit: 2127

9. As to claim 5, AAP teaches wherein said application program operations include loading said database (*page 2, lines 14-16*).

10. As to claim 6, AAP teaches wherein said IMS construct form depends from the choice of programming language used to generate a PSB (*page 4, lines 3-11*).

11. As to claim 7, AAP teaches wherein said IMS construct form depends from the order or PCBs associated with said PSB (*page 4, lines 5-8*).

12. As to claim 8, it is rejected for the same reasons as stated in the rejection of claim 3.

13. As to claim 9, it is rejected for the same reasons as stated in the rejection of claim 1. In addition, locating an I/O PCB is done before it is utilized.

14. As to claim 10, it is rejected for the same reasons as stated in the rejection of claim 9.

15. As to claim 11, AAP teaches wherein said PSB is associated with a language selected from the group consisting of COBOL, Assembly Language, PL/I, PASCAL, and C (*page 2, 1<sup>st</sup> paragraph*).

16. As to claim 12, AAP teaches wherein said IMS construct form additionally depends from the quantity of PCBs associated with said PSB (*page 4, lines 5-8*).

17. As to claim 13, Bauer teaches wherein step (b) of claim I comprises utilizing said I/O PCB to perform checkpoint processing (*col. 7, lines 1-7, col. 5, lines 8-21 and col. 7, lines 10-20*).

18. As to claim 14, Bauer teaches wherein step (a) comprises the steps of:

(a1) locating a first candidate PCB (*col. 7, lines 10-20*),

(a2) determining if said first candidate PCB is said actual PCB (*col. 7, lines 10-20*), and

(a3) if said first candidate PCB is not said actual PCB, utilizing said first candidate PCB as a pointer to locate said actual PCB (*col. 7, lines 10-20*).

19. As to claim 15, AAP fails to explicitly teach wherein said determining step comprises verifying that a name field of said first candidate PCB consists of only printable characters.

However, it would be obvious to one of ordinary skill in the art to verify that a name field of said first candidate PCB consists of only printable characters because names are consisted of only printable characters. Verifying and checking for this will decrease errors.

20. As to claim 16, Bauer teaches wherein said locating step comprises the steps of:

(a1.1) utilizing a register to access a program save area (*col. 7, lines 10-20*),

(a1.2) utilizing an HSA pointer from said program save area to access a calling program's save area (*col. 7, lines 10-20*),

(a1.3) utilizing a saved register I from said calling program's save area to access a parameter list (*col. 7, lines 10-20*), and

(a1.4) utilizing a parameter list entry from said parameter list to access said first candidate PCB (*col. 7, lines 10-20*).

21. As to claim 19, it is rejected for the same reasons as stated in the rejection of claim 1. In addition, Bauer teaches ensuring the existence of LMS constructs representing said at least one IMS database without regard for construct form characteristics (*col. 5, lines 8-21 and col. 7, lines 10-20*).

22. As to claim 20, it is rejected for the same reasons as stated in the rejection of claim 1.

23. As to claim 21, it is rejected for the same reasons as stated in the rejection of claim 2.

24. As to claim 22, it is rejected for the same reasons as stated in the rejection of claim 3.

25. As to claim 23, it is rejected for the same reasons as stated in the rejection of claim 4.

26. As to claim 24, it is rejected for the same reasons as stated in the rejection of claim 5.

27. As to claim 25, it is rejected for the same reasons as stated in the rejection of claim 6.



Art Unit: 2127

28. As to claim 26, it is rejected for the same reasons as stated in the rejection of claim 7.
29. As to claim 27, it is rejected for the same reasons as stated in the rejection of claim 8.
30. As to claim 28, it is rejected for the same reasons as stated in the rejection of claim 9.
31. As to claim 29, it is rejected for the same reasons as stated in the rejection of claim 10.
32. As to claim 30, it is rejected for the same reasons as stated in the rejection of claim 11.
33. As to claim 31, it is rejected for the same reasons as stated in the rejection of claim 12.
34. As to claim 32, Bauer teaches wherein said computer program second instructions use said I/O PCB to perform message queue processing (*col. 7, lines 1-7*).
35. As to claim 33, it is rejected for the same reasons as stated in the rejection of claim 14.
36. As to claim 34, it is rejected for the same reasons as stated in the rejection of claim 15.
37. As to claim 35, it is rejected for the same reasons as stated in the rejection of claim 16.
38. As to claim 36, it is rejected for the same reasons as stated in the rejection of claim 17.

39. As to claim 37, it is rejected for the same reasons as stated in the rejection of claim 18.
40. As to claim 38, it is rejected for the same reasons as stated in the rejection of claim 1.
41. As to claim 39, it is rejected for the same reasons as stated in the rejection of claim 2.
42. As to claim 40, it is rejected for the same reasons as stated in the rejection of claims 6, 7 and 12.
43. As to claim 41, it is rejected for the same reasons as stated in the rejection of claim 9.
44. As to claim 42, it is rejected for the same reasons as stated in the rejection of claim 13.
45. As to claim 43, it is rejected for the same reasons as stated in the rejection of claim 14.
46. As to claim 44, it is rejected for the same reasons as stated in the rejection of claim 15.
47. As to claim 45, it is rejected for the same reasons as stated in the rejection of claim 16.
48. As to claim 46, it is rejected for the same reasons as stated in the rejection of claim 17.

Art Unit: 2127

49. As to claim 47, it is rejected for the same reasons as stated in the rejection of claim 18.

50. As to claim 48, it is rejected for the same reasons as stated in the rejection of claim 11.

***Allowable Subject Matter***

51. Claims 17-18, 36-37, and 46-47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Tang whose telephone number is (703) 305-5334. The examiner can normally be reached on 8:30AM - 7:00PM, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703) 305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2127

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kt  
5/29/04



MENG-AL T. AN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100